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## **ABSTRACT**

A sensor system with variable sensor-signal processing comprises an integrated circuit sensor unit. The integrated circuit sensor unit includes a sensor element that provides a sensed signal in response to a measurement variable, and a memory device that stores adjustable coefficient values. The integrated circuit sensor units also includes a sensor signal processing unit that processes the sensed signal using adjustable coefficient values to provide a sensor output signal on a output line. The sensor system receives updated adjustable coefficient values via the output line and stores the updated adjustable coefficient values in the memory device.